

Work Order ID 101744-1

May-13-13 1:13:18 PM

Sp/17-1

101744

Page 1

Item ID: D3943-053

Accept

Revision ID:

Item Name: Chain Assembly

Start Date: 5/08/13 Start Qty: 10.00

10

Required Date: 5/24/13 Req'd Qty: 10.00

10
3

Reference:

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals: Process Plan: ML5

Date: 13-05-14 Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

	Operation Description	Section/Part Number	To:	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	revision nbr								
D3943	E								
100 *100* Large Fab	Weld per dwg A/R S.S. rod Batch: M122357	0.00							
110 *110* QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
120 *120* QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00							

Work Order ID 101744

May-13-13 1:13:18 PM

101744

Page 2

Item ID: D3943-053

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Chain Assembly

Stop

NS2

Start Date: 5/08/13 Start Qty: 10.00

10

Cust Item ID:

Required Date: 5/24/13 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Hybrid safety Yellow 4.3.5.12

0.00

130

Powdercoat

Powder Coating

m 116329

Memo

0.00

1-MASK CHAIN FROM THIS POINT ON PRIOR TO powdercoat AS PER
DWG

2-POWDER COAT:

Start Time:

Oven Temperature:

Finish Time:

11'45
400°F
12'15

3X/ML 13/5/28

140

QC3- Inspect Part Finish

0.00

140

QC

Quality Control

Memo

0.00

31 of 11 13/5/10

150

Identify as per dwg & Stock Location: W/0

0.00

150

Packaging

Packaging

101379

0.00

3 EL 13-5-28

160

QC 21-FINAL Inspection - W/o Release

13/05/30/10 MF, 13-5-29

Picklist Print

May-13-13 1:13:17 PM

Page 1

Work Order ID:	101744	Start Date:	5/08/13	Required Date:	5/24/13
Parent Item:	D3943-053	Start Qty:	10.00	Required Qty:	10.00
Parent Item Name:	Chain Assembly				
Comments:	IPP RevA: add DEO DD 09.11.18 verified by:JLM 10.02.22 verified by:EC IPP rev C 11.05.24 ECN 11-578 ec verified by:DD REV:D 11.08.16 AS PER REV.E DD VERF:JLM IPP				

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3954-5 Chain Lug		Manufactured	No			100	Each	7.0000	1	10		2/13-5-27	

Location	Loc Qty	Loc Code
WA001	90224	

D3954-9 GWT Chain Pin	Manufactured	No	100	Each	40.0000	1	7	10	2/13-5-27
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Location	Loc Qty	Loc Code
ST077	71876	40
	91954	1
	91958	9
		30

ITEM No.	QTY -041	QTY -051	QTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5	1	X		D3943-051	HANDLE ASSEMBLY	
6	1	X		D3943-053	CHAIN ASSEMBLY	
D						
11	1			D3943-1	HANDLE	
12	1			D3943-3	HANDLE EXTENSION	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
13	1			D3943-5	PLATE	
14	2			D3943-7	STUD	
15	1			D3943-9	CHAIN	
16	1			D4405-1	EYE AND FORK SWIVEL	USE CHAIN SUPPLIED WITH ITEM 39
21	1			D2690-4	LANYARD	
22	1			D3585-1	SET SCREW	
23	1			D3949-041	REMOVE BEFORE FLIGHT FLAG	
24	1			D3954-5	CHAIN LUG	
25	1			D3954-7	RATCHET LUG	
26		1		D3954-9	GWT CHAIN PIN	
C						
31	1			AN5-11A	BOLT	
32	1			AN960-516	WASHER	
33	1			MS21042L5	NUT	
39	1			8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
51	1			S-1475	SPRING	
52	1			3408ASS	BALL PLUNGER	REID SUPPLY
53	1			HX-15	SOCKET HEAD CAP SCREW $\frac{1}{4}$ -20 UNC X 0.75 LG	McMASTER CARR
54	1			HX-16	SOCKET HEAD CAP SCREW $\frac{1}{4}$ -20 UNC X 1.0 LG	HASKINS

E

SHP COPY

RETURN TO

ENGINEERING

CONTROLLED COPY

NOT TO AMENDMENT

NOTICE

WORK ORDER

101744 MCS

13-05-14

RELEASED

2011-07-29
MW

E	CHANGED D3945-3 MATT. TO SS (B8-5); FINISH NOW "NONE" (A7-5); TAP DRILL FOR 1/4-20 UNF-2B WAS PILOT HOLE NOTE (B1-5). PER PAR11-113.	MB	11.07.27
D	SHT 1 PL, ITEMS 51-54 RENUMBERED SEE PREV. REV. FOR DETAILS, ITEM 16 ADDED (VIEWS UPDATED). SHT 2 ZN D3 FLAG RELOCATED, SHT 3 ZONE D3, Ø0.12 HOLE DELETED. (SEE NCR 11-495)	AJS	11.05.16
C	RMV FINISH -041 (ZN A8-2), ADD NEW FINISH -051/-053/-1/3 (A8-3/A4-5), ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1), PAR 10-001	CP	10.01.28
B	SHT 1 PL, ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTO/N / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	
CHECKED	ASS	D3943	REV. E
MFG. APPR.		SHEET 1 OF 5	
APPROVED		TITLE	
DE APPR.	N/A	GROSS WEIGHT TOW CRANK ASSY	SCALE
DATE	11.07.27	NTS	
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8

7

6

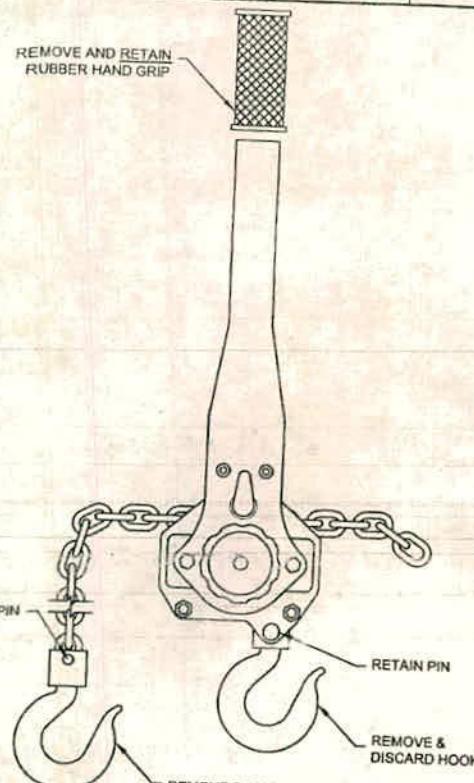
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4

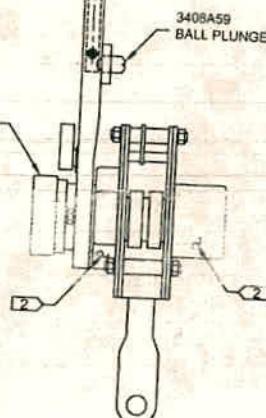
3

2

1

REMOVE AND RETAIN
RUBBER HAND GRIP

8143919 LEVER CHAIN HOIST
(SHOWN PRIOR TO MODIFICATION)
(CHAIN SHOWN SHORTENED FOR CLARITY)

8143919
LEVER CHAIN HOIST

(CHAIN NOT SHOWN FOR CLARITY)

RE-INSTALL
RUBBER HAND-GRIP
HERE

D2690-4 LANYARD
D3949-041 FLAG

HX-16 S/H CAP SCREW
S-1475 SPRING

CALIBRATION TAG

D3585-1 SET SCREW

RE-INSTALL PIN



(CHAIN SHOWN SHORTENED FOR CLARITY)

D3943-041 GROUND HANDLING CRANK ASSEMBLY

DESIGN	DSTO/N/AJS	DART AEROSPACE LTD
DRAWN	<i>A.S.</i>	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>A.S.</i>	DRAWING NO.
MFG. APPR.	<i>R.H.</i>	D3943
APPROVED	<i>R.H.</i>	REV. E
DE APPR.	N/A	SHEET 2 OF 5
DATE	11.07.27	TITLE
		GROSS WEIGHT TOW CRANK ASSY NTS

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NOTES -041:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3943-041" USING FINE POINT PERMANENT INK MARKER
- 7) CALIBRATION TAG PER DART QSI 008 4.4 (ZN C1-2)

8

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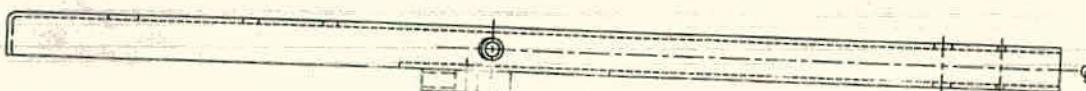
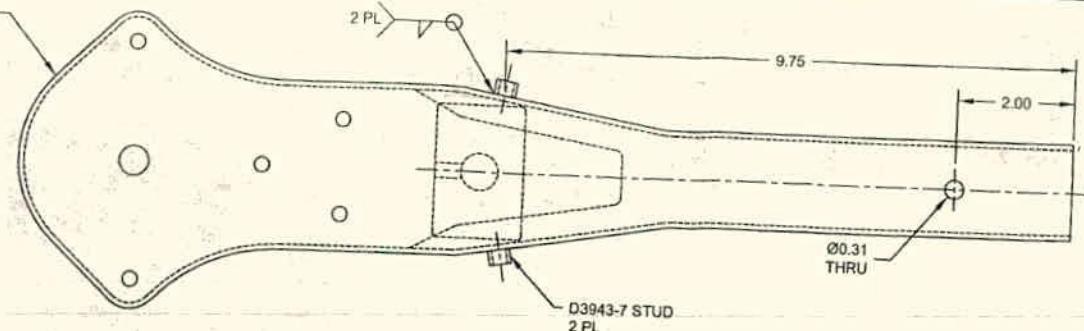
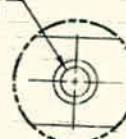
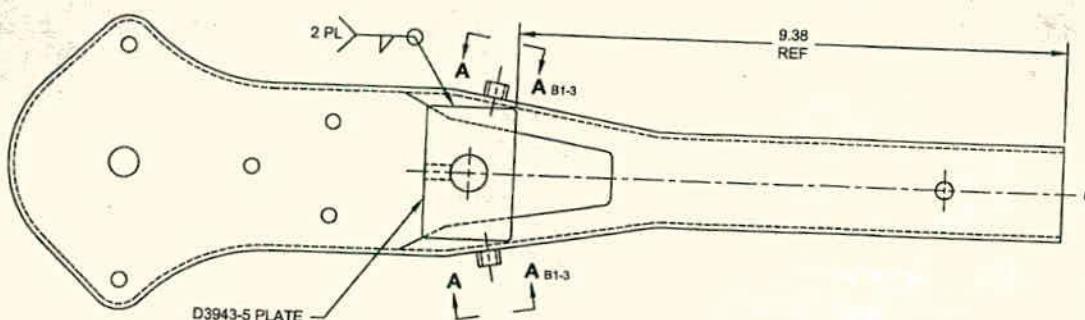
2

1

RELEASED
2011-07-29
[Signature]

10174

D3943-1 HANDLE

THREAD $\frac{1}{2}$ -20 UNC-2B
THRUVIEW A-A A5-3
(SCALE 2X) B5-3

NOTES -051:

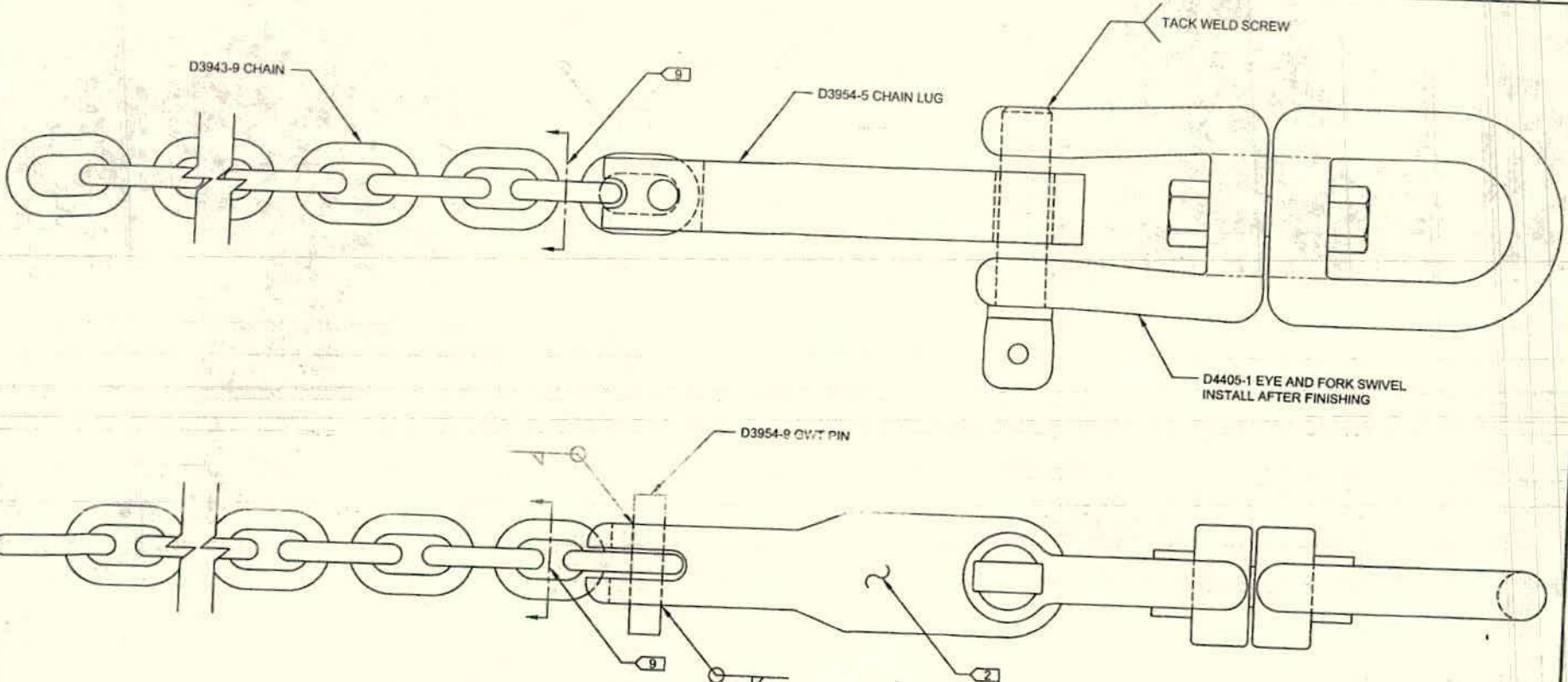
- 1) MATERIAL : N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS
PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) MASK ALL THREADS PRIOR TO FINISHING

D3943-051 HANDLE ASSEMBLY

RELEASED
2011-07-29
[Handwritten signature]

DESIGN	DSTOW/AJS	DART AEROSPACE LTD
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>[Signature]</i>	DRAWING NO.
MFG. APPR.	<i>[Signature]</i>	REV. E
APPROVED	<i>[Signature]</i>	SHEET 3 OF 5
DE APPR.	<i>[Signature]</i>	SCALE
DATE	11.07.27	NTS

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D3943-053 CHAIN ASSEMBLY

NOTES -053:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) WELD PER QSI 004
- 9) MASK CHAIN FROM THIS POINT ON PRIOR TO FINISHING

RELEASED
2011-07-29

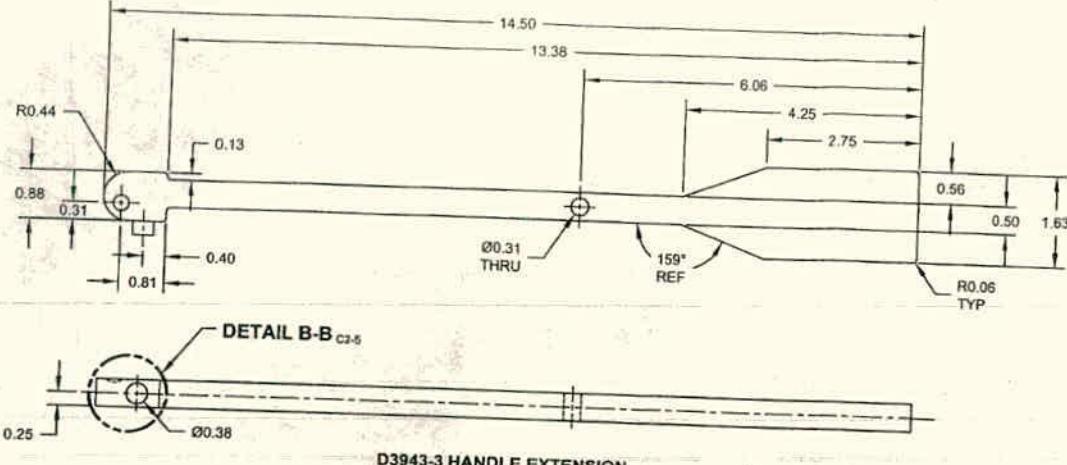
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DESIGN	DSTOW / AJS	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
		D3943	SHEET 4 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.	N/A		
DATE	11.07.27		

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8 7 6 5 4 3 2 1



D3943-3 HANDLE EXTENSION

NOTES:

1) MATERIAL -3: AISI 304/316 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
REF DART SPEC M304S
OR:

AISI 303 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
ASTM A240 OR ASME SA240
REF DART SPEC M303S

-5: MILD STEEL, SHEET
AISI 1010-1025 OR ASTM A36/A368/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-S
OR:

MILD STEEL, BAR
AISI 1010-1025 OR ASTM A36/A368/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-B

-7: MILD STEEL, ROUND BAR
AISI 1018-1025
PER MIL-S-7097
REF DART SPEC M1018-R

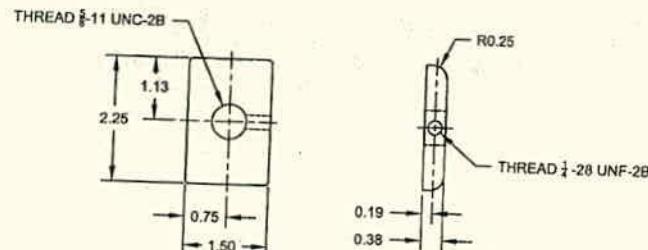
2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

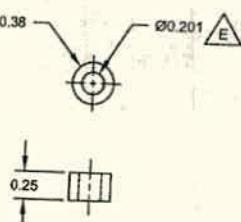
4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: N/A



D3943-5 PLATE

D3943-7 STUD
(SCALE 2X)

RELEASED
R 2011-07-28
MR

DESIGN	DSTOOL/AJS	DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO.
MFG. APPR.		REV. E
APPROVED		SHEET 5 OF 5
DE APPR.		TITLE
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